

CLAIMS

The invention I claim is:

1. An apparatus for propelling a user standing on the apparatus, comprising:
 - a platform to support the user;
 - 5 wheels;
 - a steering support adapted to transfer a directional force from the platform to pivot at least one steered wheel relative to at least one other wheel; and
 - a geartrain providing an upward return force to the platform, and further coupling at least one driven wheel to the platform so that downward motion of the platform causes 10 rotation of the at least one driven wheel to propel the platform forward.

2. The apparatus of Claim 1, wherein the wheels comprise a front set of wheels and a rear set of wheels, and the steering support mounts to a lower portion of the platform and to the geartrain.

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3. The apparatus of Claim 1, wherein the geartrain comprises an overrunning clutch.

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4. The apparatus of Claim 1, wherein the geartrain comprises a helical compression spring.

5. The apparatus of Claim 1, further comprising:

- a brake.

6. The apparatus of Claim 5, wherein the brake mounts to the geartrain.

7. An apparatus for propelling a user, comprising:

5 a platform to support the user;

wheels;

a hinge joint adapted to transfer a downward force from the platform to a geartrain, pivot downward in response to a downward force from the platform, and pivot upward in response to a return force; and

10 a geartrain coupling at least one driven wheel to the hinge joint so that a downward force from the platform rotates the geartrain causing rotation of the at least one driven wheel to propel the platform forward, and wherein the geartrain provides a return force to the hinge joint.

15 8. The apparatus of Claim 7, wherein the geartrain comprises an overrunning clutch.

9. The apparatus of Claim 7, wherein the geartrain comprises a spring.

20 10. The apparatus of Claim 7, further comprising:
a brake.

11. The apparatus of Claim 10, wherein the brake mounts to the geartrain.

12. A scooter comprising:

5 a frame;

 pedals adapted to support a user;

 wheels;

 a geartrain providing an upward return force on the pedals, and further coupling at least one driven wheel to the frame so that downward motion of the pedals causes rotation of the at least one driven wheel to propel the platform forward.

10 13. The scooter of Claim 12, wherein the geartrain comprises an overrunning clutch.

 14. The scooter of Claim 12, wherein the geartrain comprises a recovery action device.

15 15. The scooter of Claim 12, further comprising:

 a brake.

 16. The scooter of Claim 12, further comprising:

20 an attachment device to connect another scooter with a corresponding attachment device to the scooter.

17. An apparatus for propelling a platform, comprising:

means for receiving a downward force on a first portion of the platform;

means for translating the downward force from the platform to a rotational force on at least one wheel;

5 means for generating a return force on the first portion of the platform;

means receiving a downward force on a second portion of the platform;

means for translating the downward force from the platform to a rotational force on the wheel;

means for generating a return force on the second portion of the platform;

10 means for receiving a directional force on the platform; and

means for translating the directional force to the wheels to pivot a first set of wheels in a direction counter to a second set of wheels, wherein the platform moves in a lateral direction.

15 18. An apparatus for propelling a scooter, comprising:

means for receiving a downward force on a first pedal;

means for translating the downward force from the pedal to a rotational force on at least one wheel;

means for generating a return force on a second pedal;

20 means for receiving a downward force on the second pedal;

means for translating the downward force from the second pedal to a rotational force on the wheel; and

means for generating a return force towards the first pedal;

wherein the platform is propelled forward by the rotational force on the wheels.

19. A method for propelling an apparatus, comprising:

generating a downward force on a first portion of the platform, wherein the

5 downward force on the first portion of the platform is translated to a rotational force on at least one wheel, and the platform is propelled in a forward direction;

receiving a return force on the first portion of the platform;

generating a downward force on a second portion of the platform, wherein the

downward force on the second portion of the platform is translated to a rotational force

10 on the wheel, and the platform is further propelled in a forward direction;

receiving a return force on the second portion of the platform; and

generating a directional force on the platform, wherein the directional force is translated to pivot a first set of wheels in a direction counter to a second set of wheels, wherein the platform moves in a lateral direction.

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20. A method for propelling a scooter, comprising:

generating a downward force on a first pedal, wherein the downward force on the first pedal is translated to a rotational force on at least one wheel, and the scooter is propelled in a forward direction;

20 receiving a return force on a second pedal;

generating a downward force on the second pedal, wherein the downward force on the second pedal is translated to a rotational force on the wheel, and the scooter is further propelled in a forward direction; and

receiving a return force on the first pedal.